CLAIMS

What is claimed is:

1. A door lock system for a door used in a trailer, said system comprising:

a door locking apparatus comprising a back plate member, an actuator mounted on said back plate member and a locking member attached to said actuator, said back plate member configured to be mounted on an interior surface of said trailer, said locking member having a first end and a second end, said first end of said locking member configured to prevent the opening of said door when said door lock system is in a locked position, said second end of said locking member connected to an actuating rod of said actuator, said actuator configured to operatively actuate said locking member so as to selectively lock said door;

a controller unit in communication with said door locking apparatus, said controller unit having computer circuitry and componentry configured to control the operation of said door locking apparatus; and

a keypad in communication with said controller unit, said keypad configured to transmit operational instructions to said controller unit.

2. The system according to claim 1, wherein said trailer has a frame comprising a one or more tubular frame members, said first end of said locking member being configured to be slidably received in a receptor disposed in one of said one or more tubular frame members and cooperatively engaged therewith to prevent the opening of said door until an open command is received from said controller unit.

3. The system according to claim 2, wherein said locking member is configured to be slidably engaged with a header of said frame.

4. The system according to claim 2, wherein said locking member is configured to be slidably engaged with a threshold of said frame.

5. The system according to claim 2, wherein said door locking apparatus further comprises a tubular member mounted to said back plate member, said locking member is a sliding bolt slidably disposed in said tubular member and said receptor is a hole in said tubular frame member sized and configured to receive said sliding bolt.

6. The system according to claim 1, wherein said locking member is configured to operatively engage a receptor attached to a frame member of said trailer.

7. The system according to claim 1, wherein said actuating rod is releasably connected to said locking member and said actuator is releasably connected to said back plate member for selective disengagement of said actuator from said back plate member.

8. The system according to claim 1, wherein said back plate member is mounted to said door and said locking member cooperatively engages a frame member of said trailer to prevent the opening of said door.

9. The system according to claim 1, wherein said back plate member is mounted to a frame member of said trailer and said locking member cooperatively engages said door to prevent the opening of said door.

10. The system according to claim 1 further comprising a radio in communication with said controller unit.

11. The system according to claim 10, wherein said radio is configured for the transmission of signals across a wireless communication network.

12. The system according to claim 1, wherein said actuator is an electro-mechanical linear actuator.

13. The system according to claim 1, wherein said controller unit is operatively connected to a source of electrical power.

14. The system according to claim 1 further comprising a position switch in communication with said controller unit, said position switch configured to detect whether said door is in an open position or a closed position.

15. The system according to claim 14, wherein said position switch is a reed switch having a first magnet attached to said interior surface of said trailer and a second magnet attached to one of said door locking apparatus or said door.

16. A door lock system for a door used in a trailer having a frame comprising one or more tubular frame members, said system comprising:

a door locking apparatus comprising a back plate member, a linear actuator mounted on said back plate member and a locking member attached to said linear actuator, said back plate member configured to be mounted on said door, said locking member having a first end and a second end, said first end of said locking member configured to be slidably received in a receptor disposed in one of said one or more tubular frame members and cooperatively engaged therewith to prevent the opening of said door when said door lock system is in a locked position, said second end of said locking member connected to an actuating rod of said linear actuator, said linear actuator configured to operatively actuate said locking member so as to selectively lock said door;

a controller unit in communication with said door locking apparatus, said controller unit having computer circuitry and componentry configured to control the operation of said door locking apparatus;

a position switch in communication with said controller unit, said position switch configured to detect whether said door is in an open position or a closed position; and

a keypad in communication with said controller unit, said keypad configured to transmit operational instructions to said controller unit.

17. The system according to claim 16, wherein said locking member is configured to be slidably engaged with a header of said frame.

18. The system according to claim 16, wherein said locking member is configured to be slidably engaged with a threshold of said frame.

19. The system according to claim 16, wherein said door locking apparatus further comprises a tubular member mounted to said back plate member, said locking member is a sliding bolt slidably disposed in said tubular member and said receptor is a hole in said tubular frame member sized and configured to receive said sliding bolt.

20. The system according to claim 16, wherein said actuating rod is releasably connected to said locking member and said linear actuator is

releasably connected to said back plate member for selective disengagement of said linear actuator from said back plate member.

21. The system according to claim 14, wherein said position switch is a reed switch having a first magnet attached to said interior surface of said trailer and a second magnet attached to one of said door locking apparatus or said door.